



**TRANSMITTAL**  
STATE OF UTAH  
DIVISION OF WATER QUALITY  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
288 NORTH 1460 WEST  
P.O. BOX 144870  
SALT LAKE CITY, UTAH 84114-4870



Telephone: (801) 538-6146

Facsimile: (801) 538-6016

☐ MAIL

DATE: 9-23-97

☐ FAX

TO:

Tom Munson  
DOGM

FROM:

Mark Novak

PHONE #:

538 6146

PHONE #:

We are pleased to provide the following to you:

ITEM:

FAX #:

359 3940

No. of Pages Including Cover Sheet:

3

☐

For your action

☒

For your information

☐

Per previous conversation on

☐

Per your/our correspondence dated

☐

Other

MESSAGE:

Analytical results from Drum Mine

08/28/97 10:41

## Division of Water Quality

## 1997 Lab Analysis Report

ADH Page: 2

Storet No:  
 Sample Source:  
 Description: DRUM MINE HEAP 4  
 Lab Code: C  
 Lab Number: 9705292  
 Sample Date: June 11, 1997  
 Sample Time: 1220  
 Sample Type: 04

Comment: PH pH should be performed as a field test.

Field Tests

Flow, GPM	0.5
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Laboratory Analyses

T. Sus. Solids, mg/l	14.4	NO2+NO3, N, mg/l	28.1
Cyanide, mg/l	0.195	D-Calcium, mg/l	35.7
D-Magnesium, mg/l	13.8	D-Potassium, mg/l	5.3
D-Sodium, mg/l	687.0	Bicarbonate, mg/l	210
Carbon Dioxide, mg/l	1	Carbonate, mg/l	0
Chloride, mg/l	712.5	Hydroxide, mg/l	0
Sulfate, mg/l	270.5	T. Alk/CaCO3, mg/l	172
T. Hdns/CaCO3, mg/l	145.9	Turbidity, NTU	73.2
Sp. Cond. umhos/cm.	3468	TDS @ 180 C, mg/l	2172
T-Aluminum, ug/l	9600	T-Arsenic, ug/l	38.0
T-Barium, mg/l	0.092	T-Cadmium, ug/l	<1
T-Chromium, ug/l	9.0	T-Copper, ug/l	<12.0
T-Iron, mg/l	1.91	T-Lead, ug/l	8.0
T-Manganese, ug/l	54.0	T-Mercury, ug/l	<0.2
T-Selenium, ug/l	12.0	T-Silver, ug/l	<2.0
T-Zinc, ug/l	46.0	CO3 Solids	103
Cyanide H+, mg/l	0.031		

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## Division of Water Quality

ADH Page: 3

## 1997 Lab Analysis Report

Storet No:  
Sample Source:  
Description: DRUM MINE HEAP 2  
Lab Code: C  
Lab Number: 9705293  
Sample Date: June 11, 1997  
Sample Time: 1308  
Sample Type: 04

Comment: PH pH should be performed as a field test.

Laboratory Analyses

T. Sus. Solids, mg/l	34.8	NO2+NO3, N, mg/l	37.91
Cyanide, mg/l	0.191	D-Calcium, mg/l	31.6
D-Magnesium, mg/l	19.7	D-Potassium, mg/l	8.6
D-Sodium, mg/l	1120.0	Bicarbonate, mg/l	234
Carbon Dioxide, mg/l	1	Carbonate, mg/l	0
Chloride, mg/l	1185.0	Hydroxide, mg/l	0
Sulfate, mg/l	638.98	T. Alk/CaCO3, mg/l	192
T. Hdns/CaCO3, mg/l	159.9	Turbidity, NTU	73.2
Sp. Cond. umhos/cm.	5502	TDS @ 180 C, mg/l	3462
T-Aluminum, ug/l	2200	T-Arsenic, ug/l	30.0
T-Barium, mg/l	0.04	T-Cadmium, ug/l	<1
T-Chromium, ug/l	<5.0	T-Copper, ug/l	29.0
T-Iron, mg/l	0.779	T-Lead, ug/l	<3.0
T-Manganese, ug/l	38.0	T-Mercury, ug/l	<0.2
T-Selenium, ug/l	16.2	T-Silver, ug/l	<2.0
T-Zinc, ug/l	49.0	CO3 Solids	115
Cyanide H+, mg/l	0.082		



# State of Utah

## DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

Michael O. Leavitt  
Governor  
Dianne R. Nielson, Ph.D.  
Executive Director  
Don A. Ostler, P.E.  
Director

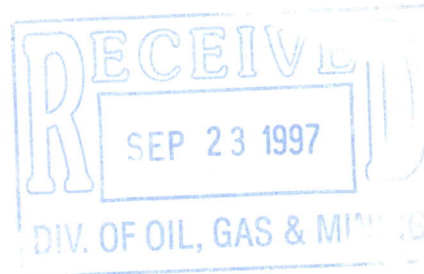
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m/027/007

**Water Quality Board**  
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William R. Williams  
Don A. Ostler, P.E.  
Executive Secretary

September 10, 1997

Mr. Ed King  
Jumbo Mining Co.  
6305 Fern Spring Cove  
Austin, TX 78730



Dear Mr. King:

Subject: Ground Water Discharge Permit Application for the Drum Mine

We have reviewed your response to our letter of July 18, 1997, which we received by fax on September 2, 1997. The ground water discharge permit, when issued, will include requirements for both planned and past operations. The compliance schedule for the permit will require immediate actions to address environmental problems at the Drum Mine site associated with facilities for which you are responsible. In particular, the old leach pads for which Jumbo Mining is responsible must be closed in such a way that there will be no significant long term discharge of contaminants to the subsurface. A cap over the leach pads to minimize infiltration will be required unless you can demonstrate that a less-protective design is justified. To date you have failed to propose an acceptable plan for development of adequate information upon which this demonstration can be made.

Because we anticipate this permit will require significant staff time to review plans for reclamation and related studies, we believe that the costs we will incur will not be compensated by the standard permit fee. Therefore, we will assess fees for this project based on time needed for staff review, at a rate of \$60 per hour. You will be billed periodically for staff time spent on this project. The time for which you will be billed for will begin to accrue from the date of this letter and includes all time spent reviewing and drafting correspondence, technical reports, meetings and the actual writing of the permit.

Upon your concurrence with the above, we will begin preparing a draft permit based on the information we have on hand at this time. In order to facilitate the issuance of this permit please respond to this letter within 30 days of your receipt of this letter. If you would like to discuss any issues involved in developing this permit please contact Mark Novak of this office.

Sincerely,

Don A. Ostler, P.E.  
Director

DAO:mtm/fb

cc: Wayne Hedberg, DOGM  
Ron Teseneer, BLM Fillmore Office  
Roger Foisy, District Engineer  
Central Utah Health Dept.  
Tom Mitchell, Attorney General

K:\WQ\PERMITS\FREDERAW\PUUMPARES.LTR  
FILE:JUMBO MINING, DRUM MINE

